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| RAYMOND Y. CHAN | | | EXAMINER | |
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| MONTEREY PARK, CA 91754 | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/684,191

Applicant(s)

ZHANG, LONG BAO

Examiner

Jason M. Han

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33,35,37,38 and 40-43 is/are rejected.
- 7) ☒ Claim(s) 34,36,39 and 44 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments concerning the 35 U.S.C. 102 rejections [Pages 5-6], filed August 27, 2007, have been fully considered but are not persuasive. The prior art to Abtahi remains commensurate to the scope of the claims as stated by the Applicant within the context of the claim language and as broadly interpreted by the Examiner [MPEP 2111], which is elucidated in the rejection below.
2. While it may be true that the transparent cover of Abtahi et al. (U.S. Patent 5,890,794 A) does not have any spherical shaped light projecting portion, it remains obvious to one ordinarily skilled in the art to have incorporated a spherical shaped transparent cover. It should also be noted that the open ended transitional statement, "comprising", does not exclude additional elements taught by Abtahi.
3. In response to Applicant's argument that the Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Claim Objections

4. Claim 33 is objected to because of the following informalities: In line 8 of the claim, "said luminary unit" lacks antecedent basis. Appropriate correction is required.
5. Claim 33 is objected to because of the following informalities: In line 10 of the claim, "said luminary elements" lacks antecedent basis. Appropriate correction is required.
6. Claim 33 is objected to because of the following informalities: In line 11 of the claim, "an luminary element" is suggested to read as "a luminary element". Appropriate correction is required.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

7. Claim 33 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 1 and 4-5 of U.S. Patent No. 6,715,900. Although the conflicting claims are not identical, they are not patentably distinct from each other because both recite comparable subject matter with the exception that the present invention teaches a transparent light shelter that is spherical in shape. It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the light shelter to have a spherical shaped light projecting portion projecting from the peripheral surface of the supporting frame to align with the luminary elements, since it has been held to be within the general skill of a worker that mere change of form or shape of an invention involves only routine skill in the art. *Span-Deck Inc. c. Fab-Con, Inc.* (CA 8, 1982) 215USPQ 835. In this case, changing the shape of the light shelter to incorporate a spherical shaped light projecting portion that is aligned with the luminary elements may efficiently utilize the illumination for a desired optical effect [e.g., diffusion or collimation].

The following claims have been rejected in light of the specification, but rendered the broadest interpretation as stated by the Applicant within the context of the claim language and as construed by the Examiner [MPEP 2111].

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 33, 35, 37-38, and 40-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abathi et al. (U.S. Patent 5,890,794 A).
9. With regards to Claim 33, Abtahi discloses a light source arrangement including:
 - An electric adapter [Figure 5: (24-26, 66)] for electrically connecting with a power source [Column 5, Lines 62-64];
 - A light head [Figures 3-5], including:
 - = An elongated supporting frame [Figures 3, 5: (40, 42)], which is made of good heat conduction material [Figures 3, 5: (40)], having a first end, an opposed dissipating end, and a peripheral surface extended from the first end to the dissipating end; and
 - = A transparent light shelter [Figure 5: (64)] sealed on the peripheral surface of the supporting frame to protect a luminary unit [Figures 1-2], wherein the light shelter has a light projecting portion projected from the peripheral surface of the supporting frame to align with luminary elements [Figure 1: (18)]; and
 - A luminary unit [Figures 1-2], including:
 - = A circuit [Figure 2: (20-22)] provided on the peripheral surface of the supporting frame and electrically connected with the electric input adapter, and the plurality of luminary elements spacedly mounted on the peripheral

surface of the supporting frame to electrically connect to the circuit for emitting light, wherein when each of the luminary elements emits the light in a radial direction with respect to the supporting frame, the supporting frame is adapted for transmitting heat from the luminary element at the dissipating end of the supporting frame [Column 8, Line 64 – Column 9, Line 9]; and

- A heat dissipating member [Figure 5: (62)] mounted at the dissipating end of the supporting frame to directly dissipate the heat generated from the luminary unit by means of heat transfer.

Abtahi does not specifically teach the projecting portion projected from the peripheral surface of the supporting frame being spherical shaped.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the light shelter to have a spherical shaped light projecting portion projecting from the peripheral surface of the supporting frame to align with the luminary elements, since it has been held to be within the general skill of a worker that mere change of form or shape of an invention involves only routine skill in the art. *Span-Deck Inc. c. Fab-Con, Inc.* (CA 8, 1982) 215USPQ 835. In this case, changing the shape of the light shelter to incorporate a spherical shaped light projecting portion that is aligned with the luminary elements may efficiently utilize the illumination for a desired optical effect [e.g., diffusion or collimation], which may add to a more ostensible signaling function. Abathi corroborates the motivation, "Thus, referring to

FIG. 7, the inner surface 84 of transparent cover 64 may be made diffuse, or roughened, in a number of ways" [Column 7, Lines 13-15].

10. With regards to Claim 35, Abathi discloses the claimed invention as cited above. In addition, Abtahi teaches the luminary element [Figure 1: (18)] having two terminal electrodes [Figure 2: (16); Figure 3: (28)] electrically coupling with the peripheral surface of the supporting frame and electrically connecting to the circuit respectively.

11. With regards to Claim 37, Abathi discloses the claimed invention as cited above. In addition, Abtahi teaches the supporting frame [Figures 3, 5: (40, 42)] being an elongated solid member extending from the first end to another dissipating end.

12. With regards to Claim 38, Abathi discloses the claimed invention as cited above. In addition, Abtahi teaches the supporting frame [Figures 3, 5: (40, 42)] being an elongated solid member extending from the first end to another dissipating end.

13. With regards to Claim 40, Abathi discloses the claimed invention as cited above. In addition, Abtahi teaches the supporting frame [Figures 3, 5: (40, 42)] having a circular cross section.

14. With regards to Claim 41, Abathi discloses the claimed invention as cited above. In addition, Abtahi teaches the supporting frame [Figures 3, 5: (40, 42)] having a circular cross section.

15. With regard to Claims 42-43, Abathi discloses the claimed invention as cited above, but does not specifically teach the supporting frame having a polygonal cross section.

However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated the supporting frame of Abtahi to have a polygonal cross section, since it has been held to be within the general skill of a worker that mere change of form or shape of an invention involves only routine skill in the art. *Span-Deck Inc. c. Fab-Con, Inc.* (CA 8, 1982) 215USPQ 835. In this case, a polygonal cross section may provide for a simplified means for determining the direction of the light sources/illumination.

Allowable Subject Matter

16. Claims 34, 36, 39, and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. The following is a statement of reasons for the indication of allowable subject matter: With regard to Dependent Claim 34, the Applicant has persuasively argued and sufficiently claimed the light source apparatus, whereby the prior art fails to teach or suggest the combination of structural limitations claimed in the preceding claim and therein to the circuit having a through guiding window, wherein when the circuit is printed on the peripheral surface of the supporting frame, the luminary element is mounted at the peripheral surface of the supporting frame within the guiding window to electrically couple with the circuit. All subsequent dependent claims are allowed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason M. Han whose telephone number is (571) 272-2207. The examiner can normally be reached on 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571) 272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Jason M Han
Examiner
Art Unit 2875

JMH (11/10/2007)


Sandra O'Shea
Supervisory Patent Examiner
Technology Center 2800